

From wang!elf.wang.com!ucsd.edu!info-hams-relay Sun Mar 10 15:07:28 1991 remote  
from tosspot  
Received: by tosspot (1.63/waf)  
via UUCP; Sun, 10 Mar 91 12:48:24 EST  
for lee  
Received: from somewhere by elf.wang.com  
id aa14311; Sun, 10 Mar 91 15:07:27 GMT  
Received: from ucsd.edu by uunet.uu.net with SMTP  
(5.61/UUNET-primary-gateway) id AA04103; Sun, 10 Mar 91 09:30:42 -0500  
Received: by ucsd.edu; id AA15998  
sendmail 5.64/UCSD-2.1-sun  
Sun, 10 Mar 91 04:30:36 -0800 for nixbur!schroeder.pad  
Received: by ucsd.edu; id AA15991  
sendmail 5.64/UCSD-2.1-sun  
Sun, 10 Mar 91 04:30:31 -0800 for /usr/lib/sendmail -oc -odb -oQ/var/spool/  
lqueue -oi -finfo-hams-relay info-hams-list  
Message-Id: <9103101230.AA15991@ucsd.edu>  
Date: Sun, 10 Mar 91 04:30:29 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams-relay@ucsd.edu>  
Reply-To: Info-Hams@ucsd.edu  
Subject: Info-Hams Digest V91 #204  
To: Info-Hams@ucsd.edu

Info-Hams Digest                      Sun, 10 Mar 91                      Volume 91 : Issue 204

Today's Topics:

Manual request  
Mod.info for the R/S Pro-2010  
New Novice and Tech Questions.  
PACKET NETWORK SOLAR TERRESTRIAL FORECAST (1/2)  
PACKET NETWORK SOLAR TERRESTRIAL FORECAST (2/2)  
POTENTIAL GEOMAGNETIC STORM WARNING  
SOLAR TERRESTRIAL BULLETIN - 10 MARCH (SOLAR UPDATE)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.  
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Date: Sat, 9 Mar 91 15:17 EDT

From: <NAGURNEY%HARTFORD.BITNET@YALEVM.YCC.Yale.Edu>  
Subject: Manual request  
To: Info-Hams@UCSD.Edu

I'm looking for manuals for the following microwave module  
black boxes.

MMT 220-28 (10 to 220 xvtr)  
MMT 432-144 (144 to 432 xvtr)

Any help will be appreciated. I will gladly pay  
reasonable copying and postage charges.

Lad Nagurney WA3EEC      NAGURNEY@HARTFORD.bitnet  
Dept. of EE  
University of Hartford  
West Hartford, CT 06117

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Date: Sat, 09 Mar 91 13:50:16 EDT  
From: WRIGHT%morekypr@CUNYVM.CUNY.EDU  
Subject: Mod.info for the R/S Pro-2010  
To: INFO-HAMS@UCSD.EDU

I own a R/S Pro-2010 scanner and I would like to know what kind of modifactions

I have the address to Bill cheek and CRB Research but I want to know what my sca  
I order the book.

Tim Wright    Future Ham    (Testing in 4 weeks)

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Date: 9 Mar 91 21:23:56 GMT  
From: zaphod.mps.ohio-state.edu!samsung!umich!vela!argo.acs.oakland.edu!  
SDKUO@tut.cis.ohio-state.edu (Steve Kuo)  
Subject: New Novice and Tech Questions.  
To: info-hams@ucsd.edu

I have a question concerning the new pool of amateur radio questions.  
With the release of the new no-code technician class license, I've  
decided it's time for me to go ham. I've got the question and answers  
for elements 2 and 3A, but they are slightly out-dated (good up to 11/1/89).  
What are the changes between the old and new questions? Is it safe to  
study using the old data that I have? How/where could I obtain the new  
questions? (maybe someone could send me the changes via email?)  
Please respond or send email..

Steven D. Kuo  
sdkuo@argo.acs.oakland.edu  
sdkuo@vela.acs.oakland.edu

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Date: Sun, 10 Mar 1991 01:33:38 -0500  
From: oler@HG.Uleth.CA (CARY OLER)  
Subject: PACKET NETWORK SOLAR TERRESTRIAL FORECAST (1/2)  
To: info-hams@ucsd.edu

\$STFR\_910309.1  
SOLAR TERRESTRIAL FORECAST (1/2) 09 MARCH 1991  
PACKET RADIO REPORT  
SOLAR TERRESTRIAL DISPATCH  
(INTERNET: OLER@HG.ULETH.CA)

VALID: 10 MAR - 19 MAR

WARNINGS:

- POTENTIAL MAJOR SOLAR FLARE WARNING (in progress).
- POTENTIAL PROTON FLARE WARNING (in progress).
- POTENTIAL GEOMAGNETIC STORM WARNING (ending 12 Mar barring major flares).
- POTENTIAL PROTON AND PCA WARNING (13 Mar - 21 Mar)

ALERTS : None in effect as of 09 Mar.

20-DAY SOLAR/RADIO/MAGNETIC/AURORAL ACTIVITY OUTLOOK

	10cm	HF Propagation +/- CON								VHF	SID ENH.				AU.BKSR				DX	Mag	Aurora			
	Flux	LO	MI	HI	PO	SWF	MUF	ERR	%	SIG	LO	MI	HI	LO	MI	HI	%	K	Ap	LO	MI	HI		
--	-----	-----								-----				-----				----	-----					
10:220	(H)	F	F	VP	VP	90	40	05	70	BN	70	70	60	10	50	65	60	5	40	NV	MO	HI		
11:225	(H)	F	F	P	P	90	42	10	60	BN	70	70	60	10	40	60	55	4	30	NV	MO	MO		
12:235	(H)	G	G	P	P	90	45	10	50	N	70	70	60	20	40	50	50	4	25	NV	MO	MO		
13:240	(H)	G	G	P	P	90	45	10	50	AN	70	70	60	20	40	50	50	3	25	NV	LO	MO		
14:250	(H)	G	G	P	P	80	45	10	50	AN	70	70	60	20	40	50	40	3	20	NV	LO	MO		
15:260	(H)	G	G	P	P	80	45	10	50	AN	70	70	60	20	40	50	40	3	20	NV	NV	LO		
16:265	(H)	G	G	P	P	80	45	10	50	AN	60	60	50	20	40	50	40	4	20	NV	NV	LO		
17:270	(H)	F	F	VP	VP	75	40	10	40	N	60	60	50	20	40	50	50	4	23	NV	LO	MO		
18:270	(H)	F	F	VP	VP	75	40	10	40	N	60	60	50	20	40	50	50	4	23	NV	LO	MO		
19:270	(H)	G	G	P	P	75	45	10	50	AN	60	60	50	10	25	50	40	4	20	NV	NV	LO		
20:260	(H)	G	G	P	P	70	43	10	50	AN	60	60	50	10	10	35	30	3	15	NV	NV	LO		
21:250	(M)	G	G	P	P	70	43	10	50	N	60	60	50	00	00	20	20	3	15	NV	NV	LO		
22:245	(M)	G	G	F	F	60	42	10	50	N	50	50	40	00	00	10	20	3	13	NV	NV	LO		

23:240 (M)		G	G	F	F	60	42	10	50		N	50	50	40	00	00	10	20		3	13		NV	NV	LO	
24:240 (M)		G	G	F	F	60	42	10	50		N	50	50	40	00	00	10	20		3	12		NV	NV	LO	
25:240 (M)		G	G	F	F	50	41	10	50		N	40	40	30	00	00	10	20		3	12		NV	NV	LO	
26:235 (M)		G	G	F	F	50	41	10	50		N	40	40	30	00	00	10	20		3	12		NV	NV	LO	
27:230 (M)		G	G	F	F	50	41	10	50		N	40	40	30	00	00	10	20		3	12		NV	NV	LO	
28:225 (M)		G	G	F	F	50	41	10	50		N	40	40	30	00	00	10	20		3	12		NV	NV	LO	
29:220 (M)		G	G	F	F	50	40	10	50		N	40	40	30	00	00	10	20		3	12		NV	NV	LO	

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NOTE: For information regarding the above format, consult part 2 (2/2) of this report in a separate message.

\*\* END OF PACKET REPORT (1/2) \*\*  
/EX

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Date: Sun, 10 Mar 1991 01:34:34 -0500  
From: oler@HG.Uleth.CA (CARY OLER)  
Subject: PACKET NETWORK SOLAR TERRESTRIAL FORECAST (2/2)  
To: info-hams@ucsd.edu

\$STFR\_910309.2  
SOLAR TERRESTRIAL FORECAST (2/2) 09 MARCH 1991  
PACKET RADIO REPORT  
SOLAR TERRESTRIAL DISPATCH  
(INTERNET: OLER@HG.ULETH.CA)

#### FORMAT OF SOLAR TERRESTRIAL FORECAST FOR PACKET RADIO NETWORK:

Date (day only)  
10.7 cm Radio Solar Flux  
Solar Activity (VL=Very Low, L=Low, M=Moderate, H=High, VH=Very High)  
HF Propagation Conditions for LOw, MIddle, HIgh, and POlar areas (see below)  
HF Short Wave Fade Probability (in %)  
HF Maximum Usable Frequency (in MHz) (weighted for low and middle latitudes).  
HF Potential MUF ERRor (in +/- MHz)  
HF Prediction CONfidence Level (in %)  
VHF SIGnal Quality (see below)  
VHF Sudden Ionospheric ENHancement Probs (in %) for LOw, MIddle, HIgh Lats  
VHF AUroral BackScatteR Probs (in %) for LOw, MIddle and HIgh Latitudes  
VHF Overall Global DX Potential (in %) - weighted for Low and Middle latitudes  
Geomagnetic Activity Kp Index (peak value - see below)  
GeoMAGnetic Activity Ap Index (peak value - see below)  
AURORAl Activity for LOw, MIddle and HIgh Latitudes (see below)

HF Prop. Quality rated as: EG=Extremely Good, VG=Very Good, G=Good, F=Fair,  
P=Poor, VP=Very Poor, EP=Extremely Poor.  
VHF Sig. Quality rated as: AN=Above Normal, N=Normal, BN=Below Normal,  
D=Disturbed (ex. associated with polar blackouts).  
Kp Planetary Index rated: 0=V.Quiet, 1=Quiet, 2=Unstld, 3=Active, 4=V.Active,  
5=Minor Storm, 6=Major Storm, 7=Maj-Sev Storm, 8=Severe Storm, 9=V.Severe.  
Ap Planetary Index rated: 0-7=Quiet, 8-16=Unstld, 17-29=Active,  
30-49=Minor Storm, 50-99=Major Storm, Severe Storm >=100.  
Auroral Activity rated: NV=Not Visible, L=Low, M=Moderate, H=High,  
VH=Very High.

\*\* END OF PACKET REPORT (2/2) \*\*  
/EX

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Date: Sat, 9 Mar 1991 14:32:10 -0500  
From: oler@HG.ULeeth.CA (CARY OLER)  
Subject: POTENTIAL GEOMAGNETIC STORM WARNING  
To: info-hams@ucsd.edu

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POTENTIAL GEOMAGNETIC STORM WARNING

\\/\\/\\/\\/\\/\\/\\/\\/\\/\\/\\/\\/\\/\\/\\/\\/\\/\\

Issued: 19:00 UT, 09 March

Geomagnetic Storm Warning

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ATTENTION:

Minor geomagnetic storming has begun over the high latitude regions recently. This activity has spread a bit further south than was originally anticipated. Middle latitude geomagnetic activity became active to very active between 14:00 UT and 18:00 UT. Activity at the present time (18:30 UT) has calmed down somewhat, although periods of active to very active conditions over middle latitudes are expected to continue for the next 24 to 48 hours.

There is a risk of brief periods of middle latitude MINOR geomagnetic storming. No major storming will occur. Most of the activity should be below minor storm levels. Magnetic K-indices of 4 and 5 are expected over the middle latitudes. Middle latitude magnetic A-indices could reach 32.

High latitudes will experience low to moderate intensity minor storming over the next 24 to 48 hours. K-indices of 5 will be dominant. Isolated brief major storming may occur over some locations with estimated K-indices between 5 and 7. High latitude A-indices could exceed 40.

Auroral activity will be most intense over the high latitude auroral zone. Some southward migration of the auroral oval is possible over the next 24 to 48 hours. High latitudes will experience mostly moderate auroral activity with some possible bursts of high activity during substorm periods. Northerly middle latitudes will witness low to moderate auroral activity. Central middle latitudes could witness low activity while southerly middle latitudes and low latitudes will not experience any auroral activity. This could change, however, if major flaring continues.

The lower latitude limit for observing auroral activity in the U.S. will range between approximately 42 N for the eastern U.S. to 44 N for the western U.S. during the evening hours. No significant auroral storming is expected, although localized active periods could materialize.

Polar and auroral radio paths will experience increased fading and absorption due to the increased geomagnetic and auroral activity which has occurred recently. Auroral flutter will dominate polar and high latitudes, particularly during the local evening hours. High and northerly middle latitude VHF auroral backscatter communications may become possible during the late afternoon hours and again near local midnight.

A geomagnetic storm alert will be posted if middle latitude magnetic activity surpasses storm level thresholds.

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Date: Sun, 10 Mar 1991 03:29:40 -0500  
From: oler@HG.Uleth.CA (CARY OLER)  
Subject: SOLAR TERRESTRIAL BULLETIN - 10 MARCH (SOLAR UPDATE)  
To: info-hams@ucsd.edu

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# SOLAR TERRESTRIAL BULLETIN

10 March, 1991

Updated Solar Activity Information

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#### UPDATED SOLAR ACTIVITY INFORMATION

No major flares occurred on 09 March, although significant spot activity has been observed in Region 6538. This region, which was the source of strong solar activity on 07 March has become slightly more compact. Spots within this region have increased from 63 on 09 March to 107 on 10 March. High levels of shear still appear to exist in this region. Some magnetic complexity is also apparent in this beta-gamma system.

Region 6538 is now centered at a location of S23E32 and is now capable of producing moderate to high terrestrial impacts if a significant major solar flare erupts. Proton activity won't be a real threat until after 12 or 13 March. However, geomagnetic and auroral impacts could be high if a strong solar flare erupts anytime between now and approximately 18 or 19 March. Proton impacts will be possible until after this region passes beyond the west limb, which is expected sometime near 20 March. PCA activity will also be possible anytime after about 13 March until near 20 March.

A 245 MHz solar radio noise storm was in progress throughout all of 09 March. This noise storm is most likely associated with Region 6538, which has shown some high spot activity recently.

Major flaring is still expected to occur from Region 6538. Major M-class flaring is likely to be observed. Isolated major X-class flares are also possible. Minor M-class flaring is a certainty from this region. Flare sizes could still reach a 3B optical rating.

Minor to major geomagnetic storming has been observed several times during the UT day on 09 March over high latitudes. Activity increased to major storm levels over the high latitudes at approximately 01:50 UT on 10 March. Activity has since subsided somewhat, although pulses of minor to major magnetic storming is still expected to occur over the high latitude regions over the next 24 hours.

Middle latitudes have experienced a couple of brief periods of minor geomagnetic storming. However, overall activity has not yet surpassed storm level thresholds over the middle latitudes. A sudden magnetic impulse was observed over middle latitude magnetic observatories at 22:46 UT on 09 March. The intensity of this SI ranged from approximately 30 to 45 gammas. Low to moderate intensity minor storming was observed over middle latitudes between 01:50 UT and 05:30 UT on 10 March. However, no significant rapid magnetic excursions were observed with this activity. The geomagnetic field over the middle latitudes has declined to generally very active levels.

Minor storm periods are still possible (if not expected).

Auroral activity increased after 01:30 UT on 10 March. Moderate auroral activity was observed over middle latitude regions. The auroral oval has shifted optically southward. The leading edge of the oval was measured to be at an elevation of approximately 50 degrees above the northern horizon at N49W112. A diffuse auroral arc was the primary activity observed during the observation. No further significant migration of the auroral oval is expected over the next 24 hours. Migration back to the higher latitudes will occur on 11 and 12 March. Overall geomagnetic and auroral activity will subside on 12 March (barring any significant solar activity).

HF radio signals have suffered some degradation due to the recent burst of geomagnetic and auroral activity. Areas most heavily affected are the high latitudes and northerly middle latitudes. Radio signal paths which enter or cross through the auroral zone (ex. polar or high latitude paths) have experienced moderate fading and increased absorption. Auroral flutter is very apparant in the high and middle latitude signals. So far, the flutter fading has not been too intense (judging by the reports received so far).

VHF auroral backscatter communications may be possible over the northerly middle and high latitude regions. Best opportunities for DX contacts exist using CW.

Please report any DX contacts on the VHF bands to "oler@hg.uleth.ca". And again, reports of auroral activity sightings can also be directed to the above address. Thanks, to all those who send in reports.

\*\* End of Bulletin \*\*

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End of Info-Hams Digest

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